

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method for reducing power consumption of a decoder in a communication system, comprising:
 - estimating a quality metric of a channel associated with a segment of a received signal;
 - determining a quality metric threshold;
 - ~~delimiting an interval based in part on the quality metric threshold;~~
 - determining a real-valued parameter Δ_0 ;
 - defining an interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold; and
 - decoding the segment when the estimated quality metric is outside of the interval.
2. (Original) The method of claim 1 wherein the estimating a quality metric comprises estimating a signal-to-noise ratio.
3. (Previously Presented) The method of claim 1 wherein the estimating a quality metric of a channel associated with a segment of a received signal comprises estimating a quality metric of a channel associated with a slot of a received signal.
4. (Previously Presented) The method of claim 1 wherein the determining a quality metric threshold comprises:
 - determining a data rate of the segment;
 - determining a number of segments received; and
 - determining a quality metric threshold in accordance with the data rate and the number of segments.
5. (Cancelled)

6. (Currently Amended) The method of claim [[5]] 1 ~~wherein the determining a real-valued parameter Δ_0 comprises~~ further comprising determining the parameter Δ_0 in accordance with a demodulator performance.

7. (Currently Amended) The method of claim [[5]] 1 wherein the parameter Δ_0 is less than or equal to zero.

8. (Currently Amended) A method for reducing power consumption of a decoder in a communication system, comprising ~~The method of claim 1 wherein the decoding the segment comprises:~~

estimating a quality metric of a channel associated with a segment of a received signal;

determining a quality metric threshold;

delimiting a plurality of intervals in accordance with the quality metric threshold;

associating each of the plurality of intervals with one of a plurality of parameters;

determining an interval from the plurality of intervals into which the estimated quality metric belongs; and

decoding the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.

9. (Previously Presented) The method of claim 8 wherein the delimiting a plurality of intervals comprises:

determining a plurality of real-valued parameters

$$\Delta_0 \leq \Delta_1 \leq \dots \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq \dots \Delta_{m+n}; \text{ and}$$

defining the plurality of intervals in accordance with the formulas:

$$[TS + \Delta_{k-1}, TS + \Delta_k], \text{ for all } k \in (1, n+m); \text{ and}$$

$$[TS + \Delta_{n+m}, \infty],$$

where n, m are non-negative, integer-valued parameters, and TS is the quality metric threshold.

10. (Original) The method of claim 9 wherein the parameters $\Delta_1, \dots, \Delta_m, \Delta_{m+1}, \Delta_{m+2}, \dots \Delta_{m+n}$ are determined in accordance with a demodulator performance.

11. (Currently Amended) The method of claim 8 wherein ~~[[a]]~~ the plurality of parameters comprise non-negative, integer-valued parameters $N_1 \leq \dots \leq N_m \geq N_{m+1} \geq N_{m+2} \geq \dots N_{n+m+1}$.
12. (Original) The method of claim 11 wherein the parameters $N_1, \dots, N_m, N_{m+1}, N_{m+2}, \dots, N_{n+m+1}$ are determined in accordance with a demodulator performance.
13. (Cancelled)
14. (Currently Amended) An apparatus for reducing power consumption of a decoder in a communication system, comprising:
 - a processor; and
 - a processor-readable storage medium accessible by the processor and containing a set of instructions executable by the processor to:
 - estimate a quality metric of a channel associated with a segment of a received signal;
 - determine a quality metric threshold;
 - ~~delimit an interval based in part on the quality metric threshold;~~
 - determine a real-valued parameter Δ_0 ;
 - define an interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold; and
 - decode the segment when the estimated quality metric is outside of the interval.
15. (Original) The apparatus of claim 14 wherein the quality metric is a signal-to-noise ratio.
16. (Original) The apparatus of claim 14 wherein the segment of a received signal is a slot.
17. (Original) The apparatus of claim 14 wherein the quality metric threshold is determined in accordance with a data rate of the segment and a number of segments received.
18. (Cancelled)
19. (Currently Amended) The apparatus of claim ~~[[18]]~~ 14 wherein the parameter Δ_0 is determined in accordance with a demodulator performance.

20. (Currently Amended) The apparatus of claim [[18]] 14 wherein the parameter Δ_0 is less than or equal to zero.

21. (Currently Amended) An apparatus for reducing power consumption of a decoder in a communication system, comprising ~~The apparatus of claim 14 wherein the set of instructions is further executable by the processor to decode the segment by:~~

a processor; and

a processor-readable storage medium accessible by the processor and containing a set of instructions executable by the processor to:

estimate a quality metric of a channel associated with a segment of a received signal;

determine a quality metric threshold;

~~delimiting~~ delimit a plurality of intervals in accordance with the quality metric threshold;

~~associating~~ associate each of the plurality of intervals with one of a plurality of parameters;

~~determining~~ determine an interval from the plurality of intervals into which the estimated quality metric belongs; and

~~decoding~~ decode the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.

22. (Previously Presented) The apparatus of claim 21 wherein the set of instructions is further executable by the processor to delimit a plurality of intervals by:

determining a plurality of real-valued parameters

$$\Delta_0 \leq \Delta_1 \leq \dots \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq \dots \Delta_{m+n}; \text{ and}$$

defining the plurality of intervals in accordance with the formulas:

$$[TS + \Delta_{k-1}, TS + \Delta_k], \text{ for all } k \in (1, n+m); \text{ and}$$

$$[TS + \Delta_{n+m}, \infty],$$

where n, m are non-negative, integer-valued parameters, and TS is the quality metric threshold.

23. (Original) The apparatus of claim 22 wherein the parameters

$\Delta_1, \dots, \Delta_m, \Delta_{m+1}, \Delta_{m+2}, \dots \Delta_{m+n}$ are determined in accordance with a demodulator performance.

24. (Original) The apparatus of claim 21 wherein a plurality of parameters comprise non negative, integer-valued parameters $N_1 \leq \dots \leq N_m \geq N_{m+1} \geq N_{m+2} \geq \dots N_{n+m+1}$.
25. (Original) The apparatus of claim 24 wherein the parameters $N_1, \dots, N_m, N_{m+1}, N_{m+2}, \dots, N_{n+m+1}$ are determined in accordance with a demodulator performance.
26. (Cancelled)
27. (Currently Amended) A processor-readable medium for reducing power consumption of a decoder in a communication system, comprising instructions executable by a processor to:
 - estimate a quality metric of a channel associated with a segment of a received signal;
 - determine a quality metric threshold;
 - ~~delimit an interval based in part on the quality metric threshold;~~
 - determine a real-valued parameter Δ_0 ;
 - define an interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold; and
 - decode the segment when the estimated quality metric is outside of the interval.
28. (Original) The processor-readable medium of claim 27 wherein the quality metric is a signal-to-noise ratio.
29. (Original) The processor-readable medium of claim 27 wherein the segment of a received signal is a slot.
30. (Original) The processor-readable medium of claim 27 wherein the quality metric threshold is determined in accordance with a data rate of the segment and a number of segments received.
31. (Cancelled)
32. (Currently Amended) The processor-readable medium of claim ~~[[31]]~~ 27 wherein the parameter Δ_0 is determined in accordance with a demodulator performance.

33. (Currently Amended) The processor-readable medium of claim [[31]] 27 wherein the parameter Δ_0 is less than or equal to zero.

34. (Currently Amended) A processor-readable medium for reducing power consumption of a decoder in a communication system, comprising instructions executable by a processor to ~~The processor-readable medium of claim 27 wherein the set of instructions is further executable by the processor to decode the segment by:~~

estimate a quality metric of a channel associated with a segment of a received signal;

determine a quality metric threshold;

~~delimiting~~ delimit a plurality of intervals in accordance with the quality metric threshold;

associating associate each of the plurality of intervals with one of a plurality of parameters;

~~determining~~ determine an interval from the plurality of intervals into which the estimated quality metric belongs; and

~~decoding~~ decode the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.

35. (Currently Amended) The processor-readable medium of claim [[27]] 34 wherein the set of instructions is further executable by the processor to delimit a plurality of intervals by:

determining a plurality of real-valued parameters

$$\Delta_0 \leq \Delta_1 \leq \dots \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq \dots \Delta_{m+n}; \text{ and}$$

defining the plurality of intervals in accordance with the formulas:

$$[TS + \Delta_{k-1}, TS + \Delta_k], \text{ for all } k \in (1, n+m); \text{ and}$$

$$[TS + \Delta_{n+m}, \infty],$$

where n, m are non-negative, integer-valued parameters, and TS is the quality metric threshold.

36. (Original) The processor-readable medium of claim 35 wherein the parameters $\Delta_1, \dots, \Delta_m, \Delta_{m+1}, \Delta_{m+2}, \dots \Delta_{m+n}$ are determined in accordance with a demodulator performance.

37. (Currently Amended) The processor-readable medium of claim [[27]] 34 wherein a plurality of parameters comprise non-negative, integer-valued parameters

$$N_1 \leq \dots \leq N_m \geq N_{m+1} \geq N_{m+2} \geq \dots N_{n+m+1}.$$

38. (Original) The processor-readable medium of claim 37 wherein the parameters $N_1, \dots, N_m, N_{m+1}, N_{m+2}, \dots N_{n+m+1}$ are determined in accordance with a demodulator performance.

39. (Cancelled)

40. (Previously Presented) The method of claim 1 wherein the quality metric is slot based.

41. (Previously Presented) The apparatus of claim 14 wherein the quality metric is slot based.

42. (Previously Presented) The processor-readable medium of claim 27 wherein the quality metric is slot based.

43. (New) The apparatus of claim 21 wherein the quality metric comprises a signal-to-noise ratio.

44. (New) The apparatus of claim 21 wherein the quality metric threshold is determined in accordance with a data rate of the segment and a number of segments received.

45. (New) The processor-readable medium of claim 34 wherein the quality metric comprises a signal-to-noise ratio.

46. (New) The processor-readable medium of claim 34 wherein the quality metric threshold is determined in accordance with a data rate of the segment and a number of segments received.